

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the pending application. The Office Action dated September 9, 2005 has been received and its contents carefully reviewed.

FIG. 1 is hereby amended. Claims 5 and 18 are hereby amended. No new matter is added. Claims 1-22 are pending. Claims 1-4 are withdrawn from consideration. Accordingly, claims 5-22 are examined. Reexamination and reconsideration of the examined claims are respectfully requested.

In the Office Action, corrected drawings in compliance with 37 C.F.R. §1.121(d) are required. Applicant hereby amends FIG. 1 to overcome the objection. No new matter has been added. Accordingly, Applicant respectfully requests withdrawal of the objection.

In the Office Action, claims 5-7 and 9 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,835,177 to Dohjo et al. (hereinafter "Dohjo"). Claim 18 is rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent Publication No. 2001/0035527 to Tanaka et al. (hereinafter "Tanaka"). Claim 8 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Dohjo in view of U.S. Patent No. 5,510,918 to Matsunaga et al. (hereinafter "Matsunaga"). Claims 10, 11, 13 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Dohjo in view of Tanaka. Claim 12 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Dohjo in view of Tanaka, and further in view of U.S. Patent No. 5,135,608 to Okutani (hereinafter "Okutani"). Claims 15 and 16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Dohjo in view of Tanaka, and further in view of U.S. Patent No. 6,621,537 to Nakamura et al. (hereinafter "Nakamura"). Claim 17 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Dohjo in view of U.S. Patent No. 6,169,592 to Choi (hereinafter "Choi"). Claim 19 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Tanaka in view of Okutani. Claims 20-22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Tanaka in view of Nakamura.

The rejection of claims 5-7 and 9 as being anticipated by Dohjo is respectfully traversed and reconsideration is requested.

Claim 5 is allowable over Dohjo in that claim 5 recites a combination of elements including, for example “forming an active layer and an ohmic contact layer on the gate insulating layer over the gate electrode.” Dohjo does not teach at least these features of the claimed invention. The method of claim 5 is different from Dohjo in that “an active layer and an ohmic contact layer” are formed on the “gate insulating layer.” In contrast, Dohjo merely teaches a semiconductor coated film 119 with a silicon nitride film deposited thereon. These films are formed on the gate insulating film. See column 13, lines 13-16. Hydrogen fluoride is applied to the surface of the semiconductor coated film to obtain ohmic contacts. See column 13, line 28-30. Therefore, Dohjo does not teach both “an active layer and an ohmic contact layer.” There is no teaching or suggestion in Dohjo that both “an active layer and an ohmic contact layer” are or could be formed. Accordingly, because Dohjo fails to teach these features of claim 5, Applicant respectfully submits that claim 5 and claims 6, 7 and 9, which depend therefrom, are allowable over Dohjo.

The rejection of claim 18 as being anticipated by Tanaka is respectfully traversed and reconsideration is requested.

Claim 18 is allowable over Tanaka in that claim 18 recites a combination of elements including, for example “wherein a photoresist used in the formation of the ohmic contact layer is removed by a dry strip method using dry gases.” Tanaka does not teach at least these features of the claimed invention. In contrast, Tanaka merely teaches forming and patterning an intrinsic a-Si film using a photoresist. The photoresist is then removed. See paragraphs [0073], [0074]. An ohmic contact layer is formed after the photoresist is removed. See paragraph [0082]. Therefore, Tanaka does not teach “a photoresist used in the formation of the ohmic contact layer is removed by a dry strip method using dry gases.” Accordingly, because Tanaka fails to teach these features of claim 18, Applicant respectfully submits that claim 18 is allowable over Tanaka.

The rejection of claim 8 as being unpatentable over Dohjo in view of Matsunaga is respectfully traversed and reconsideration is requested.

Applicant respectfully submits that Matsunaga fails to cure the aforementioned defects associated with the teachings of Dohjo. None of the cited references, singly or in combination,

teaches or suggests “forming an active layer and an ohmic contact layer on the gate insulating layer over the gate electrode,” as recited in independent claim 5. For at least this reason, claim 8, which depends from claim 5, is allowable over the cited references.

In addition, Applicant respectfully submits that there is no motivation for one of ordinary skill in the art to combine the cited references and arrive at the claimed invention with any reasonable expectation of success. As best understood, Matsunaga teaches a device where resistance between two films is kept from increasing. See column 2, lines 8-10. Dohjo teaches an array substrate arrangement where a storage capacitor can be formed. See Abstract. Therefore, Applicant respectfully submits that the cited references involve non-analogous art for the purpose of analyzing the obviousness of the subject matter at issue. Applicant further respectfully submits that the motivation to combine the references comes from the present invention and not from the cited references, which is impermissible.

The rejection of claims 10, 11, 13 and 14 as being unpatentable over Dohjo in view of Tanaka is respectfully traversed and reconsideration is requested.

Applicant respectfully submits that Tanaka fails to cure the aforementioned defects associated with the teachings of Dohjo. None of the cited references, singly or in combination, teaches or suggests “forming an active layer and an ohmic contact layer on the gate insulating layer over the gate electrode,” as recited in independent claim 5. For at least this reason, claims 10, 11, 13 and 14, which depend from claim 5, are allowable over the cited references.

In addition, Applicant respectfully submits that there is no motivation for one of ordinary skill in the art to combine the cited references and arrive at the claimed invention with any reasonable expectation of success. Tanaka teaches preventing impurities in a liquid crystal layer while Dohjo teaches an array substrate arrangement where a storage capacitor can be formed. Therefore, Applicant respectfully submits that the cited references involve non-analogous art for the purpose of analyzing the obviousness of the subject matter at issue. Applicant further respectfully submits that the motivation to combine the references comes from the present invention and not from the cited references, which is impermissible.

The rejection of claim 12 as being unpatentable over Dohjo in view of Tanaka and in further view of Okutani is respectfully traversed and reconsideration is requested.

Applicant respectfully submits that Okutani fails to cure the aforementioned defects associated with the combined teachings of Dohjo and Tanaka. None of the cited references, singly or in combination, teaches or suggests "forming an active layer and an ohmic contact layer on the gate insulating layer over the gate electrode," as recited in independent claim 5. In addition, Applicant respectfully submits that there is no motivation for one of ordinary skill in the art to combine the cited references and arrive at the claimed invention with any reasonable expectation of success. Okutani is drawn to continuously effecting dry and wet processes, and is therefore non-analogous art for the purpose of analyzing the obviousness of the subject matter at issue. Applicant further respectfully submits that the motivation to combine the references comes from the present invention and not from the cited references, which is impermissible. For at least these reasons, claim 12, which depends from claim 5, is allowable over the cited references.

The rejection of claims 15 and 16 as being unpatentable over Dohjo in view of Tanaka and in further view of Nakamura is respectfully traversed and reconsideration is requested.

Applicant respectfully submits that Nakamura fails to cure the aforementioned defects associated with the combined teachings of Dohjo and Tanaka. None of the cited references, singly or in combination, teaches or suggests "forming an active layer and an ohmic contact layer on the gate insulating layer over the gate electrode," as recited in independent claim 5. In addition, Applicant respectfully submits that there is no motivation for one of ordinary skill in the art to combine the cited references and arrive at the claimed invention with any reasonable expectation of success. Nakamura is drawn to preventing corrosion of wiring during wet etching steps, and is therefore non-analogous art for the purpose of analyzing the obviousness of the subject matter at issue. Applicant further respectfully submits that the motivation to combine the references comes from the present invention and not from the cited references, which is impermissible. For at least these reasons, claims 15 and 16, which depends from claim 5, are allowable over the cited references.

The rejection of claim 17 as being unpatentable over Dohjo in view of Choi is respectfully traversed and reconsideration is requested.

Applicant respectfully submits that Choi fails to cure the aforementioned defects associated with the teachings of Dohjo. None of the cited references, singly or in combination, teaches or suggests “forming an active layer and an ohmic contact layer on the gate insulating layer over the gate electrode,” as recited in independent claim 5. For at least this reason, claim 17, which depends from claim 5, is allowable over the cited references.

In addition, Applicant respectfully submits that there is no motivation for one of ordinary skill in the art to combine the cited references and arrive at the claimed invention with any reasonable expectation of success. Choi teaches a method of forming a dual hardness resin plate while Dohjo teaches an array substrate arrangement where a storage capacitor can be formed. Therefore, Applicant respectfully submits that the cited references involve non-analogous art for the purpose of analyzing the obviousness of the subject matter at issue. Applicant further respectfully submits that the motivation to combine the references comes from the present invention and not from the cited references, which is impermissible.

The rejection of claim 19 as being unpatentable over Tanaka in view of Okutani is respectfully traversed and reconsideration is requested.

Applicant respectfully submits that Okutani fails to cure the aforementioned defects associated with the teachings of Tanaka. None of the cited references, singly or in combination, teaches or suggests “a photoresist used in the formation of the ohmic contact layer is removed by a dry strip method using dry gases,” as recited in independent claim 18. For at least this reason, claim 19, which depends from claim 18, is allowable over the cited references.

In addition, Applicant respectfully submits that there is no motivation for one of ordinary skill in the art to combine the cited references and arrive at the claimed invention with any reasonable expectation of success. Okutani is drawn to continuously effecting dry and wet processes while Tanaka teaches preventing impurities in a liquid crystal layer. Therefore, Applicant respectfully submits that the cited references involve non-analogous art for the purpose of analyzing the obviousness of the subject matter at issue. Applicant further

respectfully submits that the motivation to combine the references comes from the present invention and not from the cited references, which is impermissible.

The rejection of claims 20-22 as being unpatentable over Tanaka in view of Nakamura is respectfully traversed and reconsideration is requested.

Applicant respectfully submits that Nakamura fails to cure the aforementioned defects associated with the teachings of Tanaka. None of the cited references, singly or in combination, teaches or suggests "a photoresist used in the formation of the ohmic contact layer is removed by a dry strip method using dry gases," as recited in independent claim 18. For at least this reason, claims 20-22, which depend from claim 18, are allowable over the cited references.

In addition, Applicant respectfully submits that there is no motivation for one of ordinary skill in the art to combine the cited references and arrive at the claimed invention with any reasonable expectation of success. Nakamura is drawn to preventing corrosion of wiring during wet etching steps while Tanaka teaches preventing impurities in a liquid crystal layer. Therefore, Applicant respectfully submits that the cited references involve non-analogous art for the purpose of analyzing the obviousness of the subject matter at issue. Applicant further respectfully submits that the motivation to combine the references comes from the present invention and not from the cited references, which is impermissible.

Applicants believe the foregoing amendments place the application in condition for allowance and early, favorable action is respectfully solicited.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at (202) 496-7500 to discuss the steps necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

Application No.: 10/697,024

Docket No. 8733.895.00-US

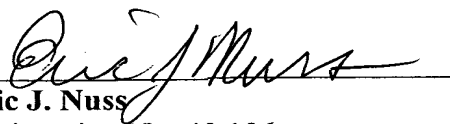
Amdt. Dated: December 8, 2005

Reply to Office Action dated: September 9, 2005

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. § 1.136, and any additional fees required under 37 C.F.R. § 1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911. *A duplicate copy of this sheet is enclosed.*

Respectfully submitted,

Dated: December 8, 2005

By 
Eric J. Nuss
Registration No. 40,106
MCKENNA LONG & ALDRIDGE LLP
1900 K Street, N.W.
Washington, DC 20006
(202) 496-7500
Attorneys for Applicant

Attachments

AMENDMENTS TO THE DRAWINGS

The attached sheet of drawings includes changes to Fig 1. This sheet, which includes Fig. 1, replaces the original sheet including Fig. 1. In Fig. 1, the legend "Related Art" has been added.

Attachment: Replacement sheet
 Annotated sheet showing changes



FIG. 1
RELATED ART

